IN THE CLAIMS:

The following listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently amended) A method of transporting data through a data network, comprising:

receiving an encoded data;

mapping said received data to a predetermined data; and

inverse multiplexing said mapped predetermined data;

wherein said receiving further includes determining a data rate of said received encoded data.

2-4. (Cancelled)

5. (Previously presented) The method of claim 1 wherein said receiving further includes recovering a clock signal from said received encoded data.

6. (Original) The method of claim 5 wherein said clock signal has a rate one tenth of said data rate.

7-8. (Cancelled)

9. (Currently amended) The method of claim 1 wherein said inverse multiplexing includes synchronizing said inverse multiplexed predetermined data.

10. (Currently amended) The method of claim 9 wherein said inverse multiplexed predetermined data is synchronized to a predetermined clock signal.

11.   (Original) The method of claim 10 wherein said predetermined clock signal includes a phase locked loop clock signal.

12.   (Previously presented) An apparatus for providing data transport through a data network, comprising:

a clock recovery unit configured to receive an encoded data, wherein said clock recovery unit is further configured to detect a data rate of said received encoded data;

a data translation unit coupled to said clock recovery unit, configured to translate said received data to a predetermined data; and

an inverse multiplexer coupled to said data translation unit, configured to inverse multiplex said translated predetermined data.

13-15. (Cancelled)

16.   (Previously presented) The apparatus of claim 12 wherein said clock recovery unit is further configured to recover a clock signal from said received encoded data.

17.   (Original) The apparatus of claim 16 wherein said clock signal has a rate one tenth of said data rate.

18-21 (Cancelled)

22.   (Original) The apparatus of claim 12 further including a modem coupled to said inverse multiplexer configured to receive said inverse multiplexed translated predetermined data for transmission.

23.   (Original) The apparatus of claim 22 wherein said inverse multiplexed translated predetermined data includes a plurality of STS-3 signals.

24.   (Original) The apparatus of claim 23 wherein said plurality of STS-3 signals includes eight STS-3 signals for transmission.

25.   (Currently amended) An apparatus for providing data transport in a network, comprising:

a plurality of FIFOs each configured to frame align a corresponding one of a plurality of STS-3 signals;

a ~~de~~multiplexer configured to ~~de~~multiplex received data including said frame aligned STS-3 signals;

a data translation unit coupled to said multiplexer configured to translate said ~~de~~multiplexed data to a predetermined data; and

a serializer coupled to said data translation unit configured to receive said translated predetermined data and accordingly to generate a corresponding encoded data.

26.   (Cancelled)

27.   (Previously presented) The apparatus of claim 25 wherein said plurality of STS-3 signals includes eight STS-3 signals.

28-36. (Cancelled)

37.   (Currently amended) A method for providing data transport in a network, comprising:

frame aligning each of a plurality of STS-3 signals;

~~de~~multiplexing a received data including said frame aligned STS-3 signals;

translating said ~~de~~multiplexed data to a predetermined data; and

generating a corresponding encoded data based on said translated predetermined
data.

38.   (Cancelled)

39.   (Currently amended) The method of claim ~~38~~37 wherein said plurality of STS-3 signals includes eight STS-3 signals.

40-44. (Cancelled)

45.   (Previously presented) The method of claim 37 further including synchronizing the translated predetermined data.

46-50. (Cancelled)

51.   (Previously presented) An apparatus for providing data transport through a data network, comprising:

      a clock recovery unit configured to receive an encoded data;

      a data translation unit coupled to said clock recovery unit, configured to translate said received data to a predetermined data, wherein said predetermined data includes a 9-bit data; and

      an inverse multiplexer coupled to said data translation unit, configured to inverse multiplex said translated predetermined data.

52.   (Previously presented) The apparatus of claim 51 wherein said 9-bit data includes one of an arbitrary set of 9-bit data.

53.   (Previously presented) An apparatus for providing data transport through a data network, comprising:

      a clock recovery unit configured to receive an encoded data;

      a data translation unit coupled to said clock recovery unit, configured to translate said received data to a predetermined data; and

      an inverse multiplexer coupled to said data translation unit, configured to inverse multiplex said translated predetermined data, wherein said inverse multiplexer is further configured to synchronize said multiplexed predetermined data to a predetermined clock signal, wherein said predetermined clock signal includes a phase locked loop clock signal.

54.   (Currently amended) An apparatus for providing data transport through a data network, comprising:

    a clock recovery unit configured to receive an encoded data;

    a data translation unit coupled to said clock recovery unit, configured to translate said received data to a predetermined data; and

    an inverse multiplexer coupled to said data translation unit, configured to inverse multiplex said translated predetermined data;

    a modem coupled to said inverse multiplexer configured to receive said inverse multiplexed translated predetermined data for transmission, wherein said inverse multiplexed translated predetermined data includes a plurality of STS-3 signals.

55.   (Cancelled)

56.   (Currently amended) The apparatus of claim 5554 wherein said plurality of STS-3 signals includes eight STS-3 signals for transmission.

57-70. (Cancelled)

71.   (New) A method of transporting data through a data network, comprising:

    receiving an encoded data, wherein said encoded data includes 8B/10B encoded data;

    mapping said received data to a predetermined data; and

    inverse multiplexing said mapped predetermined data;

    wherein said receiving further includes determining a data rate of said received encoded data.

72.   (New) The method of claim 71, wherein said encoded data includes one of a Gigabit Ethernet data and a Fiber Channel data.

73. (New) The method of claim 71 wherein said receiving further includes recovering a clock signal from said received encoded data.

74. (New) The method of claim 73 wherein said clock signal has a rate one tenth of said data rate.

75. (New) The method of claim 71 wherein said inverse multiplexing includes synchronizing said inverse multiplexed predetermined data.

76. (New) The method of claim 75 wherein said inverse multiplexed predetermined data is synchronized to a predetermined clock signal.

77. (New) The method of claim 76 wherein said predetermined clock signal includes a phase locked loop clock signal.

78. (New) An apparatus for providing data transport through a data network, comprising:

    a clock recovery unit configured to receive an encoded data, wherein said encoded data includes 8B/10B encoded data, and wherein said clock recovery unit is further configured to detect a data rate of said received encoded data;

    a data translation unit coupled to said clock recovery unit, configured to translate said received data to a predetermined data; and

    an inverse multiplexer coupled to said data translation unit, configured to inverse multiplex said translated predetermined data.

79. (New) The apparatus of claim 78 wherein said encoded data includes one of a Gigabit Ethernet data and a Fiber Channel data.

80. (New) The apparatus of claim 78, wherein said clock recovery unit is further configured to recover a clock signal from said received encoded data.

11

81.   (New) The apparatus of claim 80, wherein said clock signal has a rate one tenth of said data rate.

82.   (New) The apparatus of claim 78, further including a modem coupled to said inverse multiplexer configured to receive said inverse multiplexed translated predetermined data for transmission.

83.   (New) The apparatus of claim 82, wherein said inverse multiplexed translated predetermined data includes a plurality of STS-3 signals.

84.   (New) The apparatus of claim 83 wherein said plurality of STS-3 signals includes eight STS-3 signals for transmission.